

Listing of Claims

Please amend the claims as shown below by deleting the material indicated by strike-through or placed within double brackets and adding the underlined material. This listing of claims will replace all prior versions and listings of the claims in this application.

1. (Currently amended) A method of evaluating clotting activity in a blood or plasma sample ~~from a subject, the method~~ comprising:

(a) creating a mixture by combining *in vitro* ~~the~~[[a]] blood or plasma sample from ~~the~~[[a]] subject with:

(i) a phospholipid that is soluble in the sample, wherein the phospholipid comprises phospholipids acylated by C4 to C12 fatty acids;

(ii) a contact activator; and

(iii) calcium;

(b) incubating the mixture of (a) above for a time and under conditions sufficient for prothrombin activation; and

(c) detecting Factor X_a or thrombin enzyme activity, wherein the enzyme activity of Factor X_a or thrombin correlates with clotting factor activity in the sample, thereby evaluating clotting activity in the sample.

2. (Original) The method of Claim 1, wherein the sample is from a subject with lupus.

3. (Currently amended) The method of Claim 1, wherein the sample is further combined with Activated Protein C or a Protein C activator, wherein the level of thrombin enzyme activity correlates with Activated Protein C resistance in the sample.

4. (Currently amended) The method of Claim 3, wherein the sample is further combined with Protein S depleted plasma, wherein the level of thrombin enzyme activity inversely correlates with Protein S levels in the sample.

5. (Original) The method of Claim 1, wherein the sample is further combined with a plasma selected from the group consisting of (a) plasma known to be deficient for a particular clotting factor and (b) normal plasma.

6. (Original) The method of Claim 1, wherein the sample is from a subject that has been given heparin treatment.

7. (Original) The method of any of Claims 1-6, wherein thrombin enzymatic activity is measured.

8. (Original) The method of any of Claims 1-6, wherein clot formation is detected.

9. (Previously presented) The method of Claim 1, wherein the phospholipid consists essentially of a phospholipid selected from the group consisting of phosphatidylserine, phosphatidylhomoserine, phosphatidic acid, phosphatidylethanolamine, and a combination thereof.

10. (Currently amended) The method of Claim 9, wherein the phospholipid consists essentially of phosphatidylserine acylated by C₄ to C₁₂ fatty acids.

11. (Previously presented) The method of Claim 1, wherein the phospholipid is added to a final concentration from about 4 μ M to about 2 mM.

12. (Previously presented) The method of Claim 1, wherein the phospholipid is in a dried form prior to combination with the sample.

13. (Original) The method of Claim 1, wherein the sample is a human blood or plasma sample.

14. (Currently amended) The method of Claim 1, further comprising comparing the detected thrombin enzymatic activity with a standard.

15. (Original) The method of Claim 1, wherein the contact activator is selected from the group consisting of kaolin, clay, silica, ellagic acid, celite, diatomaceous earth, glass beads, and a combination thereof.

16-57. (Canceled)

58. (Currently amended) A method of evaluating clotting activity in a blood or plasma sample from a subject, the method comprising:

(a) creating a mixture by combining *in vitro* the[[a]] blood or plasma sample from the[[a]] subject with:

(i) a phospholipid that is soluble in the sample to a final concentration of 50 μ M to 2 mM phospholipid, wherein the phospholipid comprises phospholipids acylated by C4 to C12 fatty acids;

(ii) a contact activator; and

(iii) calcium;

(b) incubating the mixture of (a) above for a time and under conditions sufficient for prothrombin activation; and

(c) detecting Factor X_a or thrombin enzyme activity, wherein the enzyme activity of Factor X_a or thrombin correlates with clotting factor activity in the sample, thereby evaluating clotting activity in the sample.

59. (Currently amended) The method of Claim 58, wherein the phospholipid is added to a final concentration of [[2]]100 μ M to 2 mM.

60. (Currently amended) The method of Claim 58, wherein the phospholipid ~~comprises~~ consists essentially of phospholipids acylated by C4 to C12 fatty acids.

61. (Previously presented) The method of Claim 58, wherein the sample is from a subject with lupus.

62. (Currently amended) A method of evaluating clotting activity in a blood or plasma sample from a subject, the method comprising:

(a) creating a mixture by combining *in vitro* the[[a]] blood or plasma sample from the[[a]] subject with:

- (i) a phospholipid that is soluble in the sample and contains no detectable aggregates as determined by quasi-electric light scattering techniques, wherein the phospholipid comprises phospholipids acylated by C4 to C12 fatty acids;
 - (ii) a contact activator; and
 - (iii) calcium;
- (b) incubating the mixture of (a) above for a time and under conditions sufficient for prothrombin activation; and
- (c) detecting Factor X_a or thrombin enzyme activity, wherein the enzyme activity of Factor X_a or thrombin correlates with clotting factor activity in the sample, thereby evaluating clotting activity in the sample.

63. (Previously presented) The method of Claim 62, wherein the phospholipid is added to a final concentration of 50 μM to 2 mM.

64. (Currently amended) The method of Claim 62, wherein the phospholipid is added to a final concentration of ~~[[2]]~~100 μM to 2 mM.

65. (Currently amended) The method of Claim 62, wherein the phospholipid ~~comprises~~ consists essentially of phospholipids acylated by C4 to C12 fatty acids.

66. (Previously presented) The method of Claim 62, wherein the sample is from a subject with lupus.

67. (Currently amended) A method of evaluating clotting activity in a blood or plasma sample from a subject, the method comprising:

- (a) creating a mixture by combining *in vitro* the[[a]] blood or plasma sample from the[[a]] subject with:
- (i) a phospholipid that is soluble in the sample and consists essentially of phospholipids acylated by C4[[C2]] to C12[[C14]] fatty acids;
 - (ii) a contact activator; and

- (iii) calcium;
- (b) incubating the mixture of (a) above for a time and under conditions sufficient for prothrombin activation; and
- (c) detecting Factor X_a or thrombin enzyme activity, wherein the enzyme activity of Factor X_a or thrombin correlates with clotting factor activity in the sample, thereby evaluating clotting activity in the sample.

68. (Previously presented) The method of Claim 67, wherein the phospholipid is added to a final concentration of 50 μ M to 2 mM.

69. (Currently amended) The method of Claim 67, wherein the phospholipid is added to a final concentration of ~~[[2]]~~100 μ M to 2 mM.

70. (Previously presented) The method of Claim 67, wherein the phospholipid consists essentially of phospholipids acylated by C4 to C10 fatty acids.

71. (Previously presented) The method of Claim 67, wherein the sample is from a subject with lupus.

72. (New) The method of Claim 1, wherein the phospholipid consists essentially of phospholipids acylated by C4 to C12 fatty acids.